

MERCURY MARINE

EXECUTIVE ORDER U-W-001-0022 New Spark-Ignition Marine Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43018, 43101, 43102 and 43104; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following new spark-ignition marine engine and emission control systems (ECS) produced by the manufacturer are certified as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	FUEL TYPE	Very Low Emission ("Two Stars")		
2003	3M9XM.3232G0	Gasoline			
EQUIPME	NT APPLICATION	ECS & SPEC	CIAL FEATURES	ENGINE TYPE	
Outboard		Engine	4-Stroke		
ENGINE MODELS (rated power in kilowatts, kW)			ee attachments		

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) exhaust emission standard (Title 13, California Code of Regulations, (13 CCR) Section 2442(b)) and certification emission level in grams per kilowatt-hour (g/kW-hr) for this engine family. Engines in this engine family shall have closed crankcases in conformance with Part I, Section 18(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model-Year and Later Spark-Ignition Marine Engines."

	STANDARD (g/kW-hr) (estimated)	CERTIFICATION LEVEL (g/kW-hr)
HC+NOx	47.66	22.61

Compliance with the standard under 13 CCR Section 2442(b) shall be determined based on the sales-weighted average power of the engine family based on engines produced in this family for sale in California. This engine family shall not be used to determine compliance through corporate averaging.

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Sections 2443.1, 2443.2 and 2443.3 (emission control, consumer, and environmental labels), and Sections 2445.1 and 2445.2 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this ______ day of February 2002.

Allen **L**yons, Chief

New Vehicle/Engine Programs Branch

ATTACHMENT 1 0f 2

Model Year:2003	Page:
Manufacturer Name:	Issued:
Engine Family: 3M9XM.3232G0	Revised:
SI MARINE ENGINE SUPPLEMENTAL INFORMATION.	E.O.#: V-W-001-007-7

S10. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

S11 Model Designation	S12 Engine Code	Sales Co Engine (Check all ap	S13 Sales Cod ck all appr codes)		S14 Eng. Disp. (cc)	S15 Rated Power (kW)	S16 Rated Speed (RPM)	S17 Peak Torque (N-m)	S18 Peak Torque Speed (RPM)
		Calif. Only	49 State	50- State					
1F10203AD				х	323	7.4	5000	41.8	3000
1F10213AD				х	323	7.4	5000	41.8	3000
1F10352AN				х	323	7.4	5000	49.44	3000
1F10253AD				X.	323	7.4	5000	49.44	3000
1F10263AD				Х	323	7.4	5000	49.44	3000
1F10312AD				Х	323	7.4	5000	41.8	3000
.F10312AN				Х	323	7.4	5000	41.8	3000
1F10351AD				Х	323	7.4	5000	49.44	3000
1F10352AD				Х	323	7.4	5000	49.44	3000
1F10361AD				Х	323	7.4	5000	49.44	3000
1F15203AD			,	х	323	11.2	5000	45.56	3500
1F15213AD				Х	323	11.2	5000	45.56	3500
1F15253AD				Х	323	11.2	5000	51.93	4000
1F15301AD				х	323	11.2	5000	45.56	3500
1F15302AD				х	323	11.2	5000	45.56	3500
1F15311AD				х	323	11.2	5000	45.56	3500
*1F15312AD				Х	323	11.2	5000	45.56	3500
1F15352AD				Х	323	11.2	5000	51.93	4000
7F10203MD				х	323	7.4	5000	45.56	3500
7F10213MD				Х	323	7.4	5000	45.56	3500
⁷ F10253MD	:	**		х	323	7.4	5000	49.44	3000

ATTACHMENT 2 0/2

Model Year: 2002	Page:
Manufacturer Name:	Issued:
Engine Family: 2M9XM.3232G0	Revised:
SI MARINE ENGINE SUPPLEMENTAL INFORMATION.	E.O.#: 1)-W-001-002

S11 Model Designation	S12 Engine Code	S13 Sales Codes (Check all appropriate codes)			S14 Eng. Disp. (cc)	S15 Rated Power	S16 Rated Speed	S17 Peak Torque	S18 Peak Torque
		Calif. Only	49 State	50- State		(kW)	(RPM)	(N-m)	Speed (RPM)
7F10312MD				Х	323	7.4	5000	41.8	3000
7F10352MD				Х	323	7.4	5000	49.44	3000
7F15312MD				Х	323	11.2	5000	51.93	4000
7F15203MD				Х	323	11.2	5000	45.56	3500
7F15213MD				Х	323	11.2	5000	45.56	3500
7F15301MD				Х	323	11.2	5000	45.56	3500
7F15302MD				Х	323	11.2	5000	45.56	3500
F15311MD				х	323	11.2	5000	51.93	4000
7F15352MD				Х	323	11.2	5000	45.56	3500
11									